AMENDMENT

Please amend the application as follows:

In the claims:

Please cancel claim 44.

Please replace claims 1-4, 9-11, 14, 16, 28-29, and 45-49 with amended claims 1-4, 9-11, 14, 16, 28-29, and 45-49 as follows:

E1 Sub F1

– 1. (Thrice Amended) An isolated or recombinant nucleic acid comprising a nucleic acid sequence consisting essentially of SEQ ID NO:3, or its complement, wherein the nucleic acid is capable of identifying or detecting a Giant Cell Arteritis (GCA) associated nucleic acid.

E2 Sub F2

2. (Twice Amended) The nucleic acid of claim 1, wherein the nucleic acid sequence is 10 to 50 nucleotides.

E3 Sub F3

3. (Thrice Amended) The nucleic acid of claim 1, wherein the nucleic acid sequence is at least 50 nucleotides.

4. (Thrice Amended) An isolated or recombinant nucleic acid comprising a sequence as set forth in SEQ ID NO:3, or its complement.

E4 Sub F4

9. (Twice Amended) A nucleic acid probe comprising a nucleotide sequence consisting essentially of a sequence which specifically hybridizes to a nucleic acid comprising a sequence as set forth in SEQ ID NO:3 under stringent conditions, wherein the stringent conditions include a wash step comprising a wash in 0.2X SSC at a temperature of about 65°C for about 15 minutes.

10. (Thrice Amended) The nucleic acid of claim 1, claim 4, claim 9, or claim 45, wherein the nucleic acid sequence is between about 15 and about 200 residues in length; is between about 25 and about 100 residues in length; or is between about 35 and about 75 residues in length.

11. (Thrice Amended) An expression vector comprising at least one nucleic acid operably linked to a promoter, wherein the nucleic acid comprises a sequence as set forth in claim 1, claim 4, claim 9, or claim 45.

14. (Thrice Amended) A transformed cell comprising the nucleic acid of claim 1, claim 4, claim 9, or claim 45.

16. (Thrice Amended) A polymerase chain reaction (PCR) primer pair that can amplify a nucleic acid sequence as set forth in claim 1, claim 4, claim 9, or claim 45, or a subsequence thereof, under in situ or in vitro conditions.

28. (Thrice Amended) A kit for detecting the presence of nucleic acid sequences associated with GCA in a sample comprising a nucleic acid as set forth in claim 1, claim 4, claim 9, claim 16, or claim 45, wherein the nucleic acid of the sample detectably hybridizes to a nucleic acid as set forth in claim 1, claim 4, claim 9, claim 16, or claim 45 under in situ or in vitro conditions.

29. (Thrice Amended) A kit for detecting the presence of nucleic acid sequences associated with GCA in a sample comprising an amplification primer pair that can amplify a nucleic acid in the sample having a sequence as set forth in claim 1, claim 4, claim 9, claim 16, or claim 45 under in situ or in vitro conditions.

45. (Amended) An isolated or recombinant nucleic acid consisting essentially of a nucleic acid sequence encoding a polypeptide as set forth in SEQ ID NO:4, or its complement.

46. (Amended) A method for diagnosing GCA comprising the following steps:

(a) providing a nucleic acid as set forth in claim 1, claim 4, claim 9, or claim 45, wherein the nucleic acid is capable of detectably hybridizing to a GCA associated nucleic acid under in situ or in vitro conditions;

(b) providing a tissue sample;

(c) contacting the nucleic acid with the sample; and

(d) detecting whether the nucleic acid hybridizes to a nucleic acid in the sample, wherein the specific hybridization is diagnostic for GCA.

47. (Amended) A method for diagnosing GCA comprising the following steps:

(a) providing a nucleic acid amplification primer pair as set forth in claim 16, wherein the primer pair can amplify a GCA-associated nucleic acid under in situ or in vitro conditions;

(b) providing a tissue sample;

(c) contacting the primer pair with the sample under amplification reaction conditions; and

(d) detecting whether the primer pair has amplified a nucleic acid in the sample, wherein amplification is diagnostic for GCA.

48. (Amended) A method for detecting the presence of a nucleic acid sequence as set forth in SEQ ID NO:3 to diagnose GCA comprising the following steps:

(a) providing a nucleic acid as set forth in claim 1, claim 4, claim 9, or claim 45, wherein the nucleic acid is capable of hybridizing to a GCA associated nucleic acid under in situ or in vitro conditions;

(b) providing a biological sample comprising a nucleic acid;

(c) contacting the nucleic acid with the biological sample under conditions wherein the nucleic acid is capable of hybridizing to a nucleic acid comprising a sequence as set forth in SEQ ID NO:3 under in situ or in vitro conditions; and

(d) detecting whether the nucleic acid specifically hybridizes to a nucleic acid in the sample, wherein the specific hybridization is diagnostic for GCA.

E9

49. (Amended) A method for detecting the presence of a nucleic acid sequence as set forth in SEQ ID NO:3 to diagnose GCA comprising the following steps:

(a) providing an amplification primer pair capable of detecting a nucleic acid comprising a sequence as set forth in SEQ ID NO:3 by amplification;

(b) providing a biological sample comprising a nucleic acid;

(c) contacting the amplification primer pair of step (a) with the biological sample under conditions wherein the amplification primer pair is capable of amplifying the nucleic acid; and

(d) detecting the presence of an amplification product, wherein the presence of an amplification product is diagnostic for GCA. --